THE

BOSTON MEDICAL AND SURGICAL

JOURNAL.

VOL. XXII. WEDNESDAY, MAY 20, 1840. No. 15.

IMPROVED SURGICAL APPARATUS.

The Description and Application of an Improved Apparatus for particular Fractures and Dislocations of the Extremities, illustrated by Cuts and Cases, with Remarks. By LUKE HOWE, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

ANYTHING new in this branch of surgery may, perhaps, be considered as uncalled for, at this time, as the professional mind is pre-occupied by the many improvements in it which have recently been introduced into practice. It was the spirit of inquiry undoubtedly demanded by the subject, that has given origin to these improvements, and re-called into successful practice those inventions which had been permitted too long to slumber with the ashes of their authors. The present, then, may be the proper period to invite the professional attention to any supposed improvements on this subject.

It was correctly said by Mr. Liston, that "The possession of a [illegible] set of splints is not all that is wanted; the surgeon must have a head to know how to make use of them." The writer, on former [illegible] invited the attention of practitioners to some parts and [illegible] his apparatus; and at this time an increased demand for them [illegible] desirable that their application should be more particularly described and illustrated, so that those who may possess, might "know how to use them."

Much credit is claimed for the "immovable apparatus," that it affords such security to the fractured limb, particularly the leg, that the patient can be safely indulged in movements in and out of the bed. Those who have witnessed the writer's cases under treatment for the fracture of the leg, or have made use of his apparatus, will bear testimony to the safety in which patients enjoyed this privilege, and to their freedom from pain in simple fractures. Should the writer's apparatus be honored by the approbation of practitioners, he does not expect it will share any better fate than the many other contrivances which have been invented and approved—tried and laid aside—to be forgotten with the memories of their authors.

---

* In his "Observations on the various methods of treating the fractures of the os femoris, with cases, in which a new apparatus was successfully used." N. E. Journal of Medicine and Surgery for 1824, No. 3, Vol. XIII. Also in a Dissertation on the Treatment of Dislocations and Fractures, read before the N. H. Medical Society at its annual meeting in 1827.

FRACTURE OF THE SHAFT AND NECK OF THE OS FEMORIS.

First Method. ***Apparatus.***—A rachet wheel, windlass and pulley (fig. 1), a gaiter, a leathern or paste-board case with straps, and a paste-board splint shaped to the anterior third of the thigh. A narrow bedstead should be selected, and where a mattress is not to be had, as is generally the case in the country, a straw bed which has been some time in use should be laid on boards fitted to the bedstead, and over this two or three soft and firm blankets and sheets should be spread.

Fig. 1.

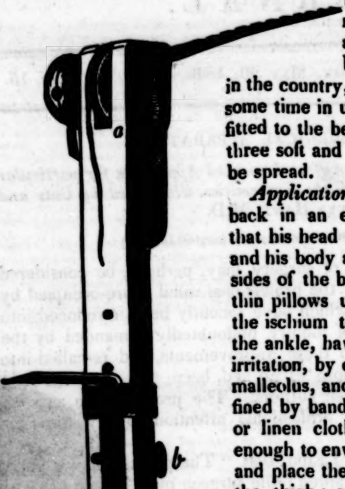


Fig. 1.—*a*, a small brass pulley, screwed to the side of the windlass staff. *b*, a pin to regulate the height of the windlass and pulley.

Application.—Place the patient on his back in an extended position, taking care that his head be near the head of the bed, and his body and limbs equidistant from the sides of the bed and parallel to them; place thin pillows under the fractured limb, from the ischium to the heel; lace the gaiter on the ankle, having previously secured it from irritation, by covering the tendo-Achillis, the malleolus, and instep, by cotton batting confined by bandage; spread a strip of cotton or linen cloth into the *thigh case*, broad enough to envelope the thigh; raise the limb and place the thigh case, thus lined, under the thigh; screw the windlass staff to the foot-piece of the bed; tie the cord of the windlass into the loop of the gaiter in the line of the axis of the limb; raise the foot of the bed from 4 to 8 inches, according to the power of extension which the case may require, to be supported by blocks or bricks under its posts; and now suspend a weight of from four to six pounds from the lever of the windlass. While extension is thus being made, soothing friction will dispose the muscles to relax. After a short time more force may be applied to the lever to the extent necessary for the coaptation of the fracture. When this has taken place, the lining cloth should be wrapped smoothly over the thigh, some soft compresses placed under the trochanter, and on other parts, where it may be required to prevent irritation—the paste-board splint laid on the fore part of the thigh, and the whole secured by buckling the thigh and pelvis straps. After this, the extending force should be lessened by removing some of the weight, or by slipping it to a notch on the lever nearer the wheel, so as to produce no more extension than may be necessary, and can be borne without pain or considerable weariness.

On the second or third day, or at the first dressing, the weight may be removed from the lever of the windlass, and suspended over the brass pulley attached to the side of the windlass staff, as the weight or extending force obeys the motion of the body and limb better when made over the latter than by the former.

At this dressing the thigh straps may be unbuckled, and the anterior paste-board splint removed, so as to permit an examination of the state of the fracture. Accurate admeasurement should now be made between the anterior superior spinous process of the ilium and the internal ankle; as on this test depends very much the success of the treatment. A little allowance should be made for the stretching of the ligaments of the joints, so that the fractured should be found a little longer than the sound limb. After re-dressing, little more will be required than occasionally to tighten the straps as inflammation subsides, to keep the foot by proper supports from being everted, and to adjust the height of the pulley. If, however, the patient should complain of pain about the ankle, more compresses should be placed under the gaiter; if the limb be found too long, some of the weight should be removed; and if too short, more should be added.

The above treatment is all that is *necessary* to effect a perfect union in fractures both of the shaft and the neck of this bone. I have in two cases found it convenient to connect the pelvis-strap by a cord to the head-board, and buckle on the perineal strap and soft compresses; and in one case, added connecting bands from the pelvis-strap to each side of the bedstead. But these additions were removed after a few days.

Under this treatment the only inconvenience the patient suffers is from the weariness of confinement, and even of this he does not complain after a few days. Under this uniform extension he should experience *no pain* in a simple fracture. If he does, it will be found, on admeasurement, that the inferior fragment of the fractured bone is retracted, and more weight in that case would be required, as pain at the fractured part almost invariably arises, in any mode of treatment, from deficient or unsteady extension.

When there is fracture of both the thigh and leg on the same side, as in one case in which I assisted the attendant surgeon in the early treatment, extension should be made from the ankle and also from a well-quilted and padded band laced on above the knee, by weights suspended over separate pullies.

The history of the many cases of the fracture of the shaft of the femur which have been successfully treated by the writer, according to the above method, would transcend the proper limits of this paper. He would only state that a similar treatment of four cases of the fracture of the neck of this bone resulted in perfect success.

The above mode of extension and counter-extension would probably be an important addition or improvement to the various kinds of apparatus in which extension is made by bandage or screw, and especially to "the immovable apparatus," before the bandage is dried, and even subsequently.

FIG. 2.

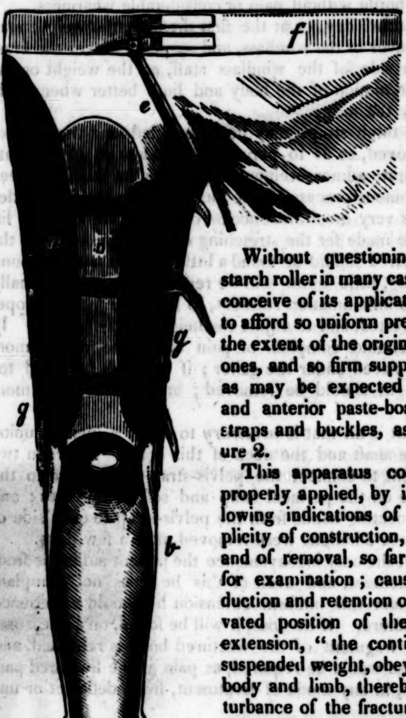


FIG. 2.—*a*, a leather splint or case, embracing the knee, trochanter and ilium, and nearly the circumference of the thigh, but leaving a space in proportion to its size on its anterior surface, for the paste-board splint, D. *g, g, connecting irons*, by the screws and thumb-nuts of which, the apparatus is adapted to the length of the limb, and extension, in certain cases, made. *b*, the leg splint, as represented in fig. 3, before the roller is applied. *c*, the rachet-wheel windlass, which is connected with the gaiter by a cord. *e, f*, the perineal and pelvic straps.

Without questioning the utility of the starch roller in many cases of fracture, I cannot conceive of its application to the thigh, so as to afford so uniform pressure to its muscles, to the extent of the origin of the most powerful ones, and so firm support to the trochanters, as may be expected by the *leathern-case* and anterior paste-board spint, confined by straps and buckles, as may be seen in figure 2.

This apparatus commends itself, when properly applied, by its answering the following indications of treatment: viz., simplicity of construction, facility of application, and of removal, so far as may be necessary for examination; causing no pain in the reduction and retention of the fracture; the elevated position of the limb; the means of extension, "the continued effort" of the suspended weight, obeying the motions of the body and limb, thereby preventing the disturbance of the fracture; being in all essential particulars self-adjusting, requiring but a few visits from the surgeon; and admissible where there is a fracture of the leg on the same extremity of the fracture of the shaft or neck of the thigh.

Second Method, or *Apparatus for the upper part of the shaft of the femur* (fig. 2).—This method of treatment did not result from the discovery of any important defect in the one first described, but from the facility with which an apparatus for the fracture of the thigh can be formed by the union of the *posterior-concave splint* (fig. 3) with the *leathern-case* of the thigh, by *uniting-slides* at the knee, without any other addition to the apparatus, so as to afford any amount of extending or counter-extending power that the case might require, without causing irritation of the parts to which it is applied.

Application.—Place the extended limb into the apparatus, having prepared the thigh-case and leg-splint as before described; adjust the apparatus to the length and natural direction of the limb by turning the thumb-nuts of the slides; place the gaiter on the ankle, into the loop of which, tie the cord of the windlass; buckle the pelvic and perineal straps, the latter over soft compresses; and now make the necessary extension, by turning the windlass by the lever. When coaptation of the fracture has taken place, apply the paste-board splint to the forepart of the thigh, and buckle the thigh straps over all. To counteract the shortening of the limb by the relaxation of any part of the apparatus, a small weight should be suspended from the lever for a few of the first days of treatment. The foot of the bed should be raised as in the first method; and should the perineal band cause irritation, a weight should be suspended over the pulley, as in the first method, the cord being connected with the loop at the lower end of the leg or thigh-splints. In this way we can adjust the force of the extension to the contractile power of the muscles, and can apply it to one or more parts of the limb where it can be best borne by the patient; and thus avail ourselves of two forces of extension, and two of counter-extension, in cases where they may be desirable. A roller should be applied to the foot and leg over the splint; and, to complete the dressing, the usual inverted cradle or hoops should be placed over them to prevent the eversion of the foot by the pressure of the bed-clothes.

By whatever method a fracture of the femur may be treated, the limb should be gradually flexed at the knee after removing the extension, and before removing the patient from the bed, by placing under it pillows or other sufficient support; and should extension be found necessary at this stage of treatment, it can be conveniently made while the extremity is in a flexed position, by turning down the thumb-nuts of the connecting slides—thus forcing the tubes of the screws against the staples of the upper extremity of the leg-splint, causing pressure of the splint against the calf of the leg, and consequently extension of the thigh.

Where the flexed position of the limb should be preferred in the management of a fractured femur, this apparatus would form a convenient double inclined plane, by which extension could be graduated by the screw, much more conveniently than by the weight of the body.

Extension may be removed in cases of the fracture of the shaft of the femur, from four to six weeks after the date of the accident; and in those of the neck, not until about eight or ten weeks. Flexion and occasional motion should be given to the limb, for about a week before the patient is permitted to leave, or is taken from his bed.

FRACTURES OF THE LEG.

First. Oblique fracture of the tibia and fibula. Apparatus.—The posterior-concave splint (fig. 3). The garter, with the fobs, a gaiter and roller.

Application.—Lace the garter on below the knee and the gaiter on the ankle, securing the tendons from unequal pressure of both by soft compresses; adapt the splint to the sound limb, over batting or compresses, where they be necessary to give it a uniform support; then adjust the splint to the fractured leg; slip the fobs over the extended ears of the splint, *b, b;* buckle the straps of the fobs to the garter, and tie the cord of the windlass to the strap of the gaiter. Now make extension by turning the windlass by the lever, slowly and gradually, till coaptation has been found to have perfectly taken place. Then apply the roller over the foot and leg, having placed compresses on the inner side of the tibia, to give all parts an equal support, and preserve the natural shape of the limb. The foot may be supported at its proper angle with the leg by a piece of roller being passed round it and pinned to the dressing near the knee. All pain is removed from the moment extension is made, and will not return unless shortening of the leg is permitted by the slipping and stretching of some parts of the apparatus. To prevent this, a small weight should be suspended from the lever during the first twenty-four hours of treatment. After this, the necessary extension being retained by the windlass and rachet-wheel, the patient may be permitted to leave his bed, sit in a chair, walk on crutches, and even ride in an easy carriage, without risk of displacing the fracture or retarding its union.

Fig. 3.

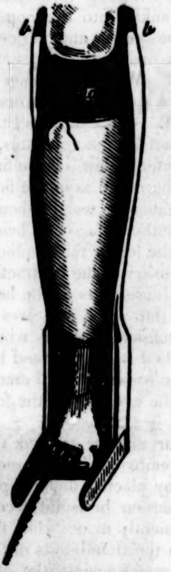


Fig. 3.—*a*, the laced garter. *b, b*, the fobs on the extended lateral portions of the splint, connected to the garter by straps and buckles. The construction of this splint is similar to fig. 4, excepting the excavation for the heel, and the corresponding flat surface under it, are longer; and the addition of the rachet-wheel windlass.

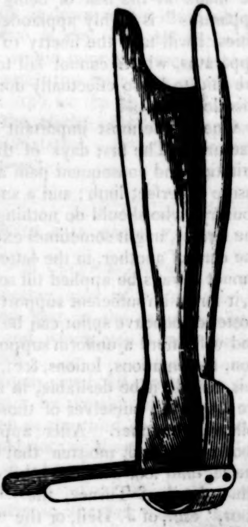
Second. Transverse fracture of one or both bones of the leg. Apparatus.—The posterior-concave splint (fig. 4). A piece of cotton cloth of the length of the leg, and a little wider than its circumference, compresses and a roller.

Application.—Adjust the splint to the sound leg, as in the first method, over necessary compresses; lay the cloth smoothly over the splint; raise the fractured limb, and bring the splint up to its place, then let the leg and splint settle down on pillows; bring the cloth up on each side and wrap it smoothly over the anterior part of the leg; and apply the roller to the foot and over the leg and splint. It is convenient to have separate rollers for the foot and leg. The foot may be supported by a strip of cloth or roller being carried round the foot-pieces of the splint and the foot, or round but one of the foot-pieces, if it be necessary to give the foot an inclination outward or inward. Compresses should be interposed between them and the foot, to prevent irritation; between the splint and the leg where there be space to admit them, particularly at the tibial side; and where they may be necessary.

I have practised this or a similar method of treatment of the fractures of the leg during the last fifteen years, and have ever permitted the patient to enjoy the privilege of leaving the bed and sitting in his chair, resting his leg over an inclined plane or some other convenient support. Even in a very bad compound dislocation of the tibia and fracture of the fibula, the leg being supported by this splint, the patient was daily taken from the bed for the purpose of admitting of more convenient dressings of the wound, without any disturbance of the wound or fracture.

During the above time I have tried various materials in the construction of splints of a similar form: viz., sole-leather, book-binders' paste-board, sheet zinc, and a composition of paper and cotton cloth cemented by a paste of flour and starch, or a solution of gum arabic, &c. These were shaped on moulds of the form of the leg, also of the thigh and upper extremities. These form very convenient and firm splints for the latter, and for the former excepting where both bones of the leg are fractured, accompanied with much inflammation and swelling, in which case the necesssary fomentations and lotions cannot be used without injury to the texture of such splints. For these and other reasons the wooden splint (fig. 4) is to be preferred in fractures of both bones of the leg. It affords an unyielding uniform support to the limb, prevents the depression of the heel and consequent anterior curvature of the tibia, sometimes called, though improperly, the rising of the bone, and by compressing the large posterior muscles of the leg, restrains their contractions. The broad base of the lower part of the splint prevents the rotation of the leg or eversion of the foot, when the patient is lying in bed or sitting in the chair. Indeed, it would seem that this splint combines those qualifications which have, it has been said, "been long a desideratum:" viz., "a cheap, simple and efficient splint, in which a broken leg could be placed, adjusted and secured during the time necessary for the completion of the process of union, and which would admit of the removal of the bandage for the purpose of attending to the state of the soft parts."

Fig. 4.



Notwithstanding I have found the common roller sufficient to confine the splint to the leg and secure the fracture from displacement, I have sometimes applied a splint of book-binders' pasteboard, moistened, to the anterior part of the leg, cut to the length and breadth of it, not covered by the posterior splint; which, when dry, together with the rest of the apparatus, forms a neat and unyielding case for the limb.

I am aware that further remarks on the application of this splint must be made at the risk of being thought tedious, but as the "immovable apparatus" is highly applauded by the profession in some hospitals and cities, I will take the liberty to suggest some further modifications of my apparatus, which cannot fail to fulfil the indications of treatment which are said to be so effectually done by the starch bandage, and some which this does not.

One of the most important indications is a speedy reduction of the fracture. The first days of the treatment are as important in removing irritation and consequent pain and inflammation, as the last weeks are to insure a perfect limb; and a surgeon in private practice, especially in the country, who should do nothing effectually for the relief of his patient in the former, might sometimes experience the mortification of finding him in the care of another, in the latter period. The "immovable apparatus" cannot always be applied till some days after the accident; and when it is, it forms no sufficient support till the third day of its application. The posterior-concave splint can be applied at the earliest stage of treatment, and will afford a uniform support to the limb, and every facility, by position, fomentations, lotions, &c., for the removal of inflammation. After this, should it be desirable, in addition to the advantages of this splint, we may avail ourselves of those of the "immovable apparatus" in the following manner. After applying the common roller, as has been above described, moisten that part of it which comes in contact with the leg and foot with the "albumen" of Scultetus, the "oxycrate cum alb. ovor." of Turner, the "glue, varnish, paste of eggs, sugar and flour," &c., of J. Bell, or the "solution of starch" of Suitin. Then the second and third roller may be added, the same part of each being saturated with the one of the above articles used for the first. I have found Alfred Swee's "composition* for moulding tablets for fractures," made excellent splints or cases to enclose the fractured upper extremities; and it would be a very convenient substitute for the above articles. When the bandage on which has been spread either of the above solutions, has become dried, it should be slit open on the edge of the splint on each side, and at the edge of each foot-piece. A dry or an adhesive roller may now be cast over the splint, and that portion of the rollers which has thus been formed into a firm tablet. The limb is now completely encased with so much firmness as to enable the patient to walk with crutches without any hazard of disturbing the fracture. The tablet can be removed for the purpose of examination as often as it may be desirable, and replaced with the greatest facility.

Plaster of Paris, or stucco, which has for more than a century been used in Arabia, in the treatment of fractures, and recently in France, might be used as a convenient auxiliary in the application of this splint. After the splint is properly adjusted to the limb, lay a piece of cotton or linen cloth over the fore part of the leg and upper part of the foot, so wide that the edges may hang over each side of the splint; cut slits at the ankle so that the cloth may lie smoothly; then with the hand cover the cloth with the plaster, insinuating it into any space there may be between the splint and leg, by pressing it down within the doublings of the cloth. In a few minutes the stucco is dry, and the leg encased, and though the swelling of the limb would raise the stucco tablet, the firmness of the latter would greatly resist the retraction of the bones. This tablet could be raised from the limb for the purpose of examination, by gently lifting at the edges of the cloth. On being replaced, it should be confined by common or elastic straps.

---

* This composition is made by rubbing whiting with the mucilage of gum Arabic.—Lancet, and Bell's Medical Library, Vol. III., No. 9.

[To be continued.]

A SECOND CASE OF TETANUS IN THE SAME FAMILY.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—It is not a little singular that another case of tetanus should so soon have occurred in my practice, and that in the same family with that of which I gave you an account, and which you did me the honor to publish in your Journal of April 16th.

On the 1st of April, Cordelia Whitman, aged 19, thrust the tine of a table-fork quite through her left thumb by the side of the nail. She had some symptoms of tetanus so soon as the third day afterwards, for which she took opiates, and had a suspension of them until the 12th of the month. They then returned again, when I first saw her. I found her in bed with her head raised from the pillow, which she seemed averse to have it touch. She had pain in the left side of her face, temple and head, but none in her stomach, as was the case with Ferguson, a few days before, in the same house, from having punctured his toe with a pitchfork; and unlike him, she however had continual nausea, and disposition to vomit. The action of her stomach in retching was *peculiar*, evidently spasmodic, and did not indicate the presence of any offensive matter. I speedily examined the punctured part, and found her thumb almost totally divested of feeling, so that she did not flinch in the least by as smart a pressure as I could make with my own thumb and forefinger. After prescribing a pill composed of opium, acetate of lead, and Peruvian balsam, and applying to the pained parts a solution of the *cyanuret potassium*, I had her thumb well embrocated with a mixture of oil of turpentine and tinct. cantharides, and then surrounded with *emp. epispastic.*

Next day, these applications had produced no action—no vesication, no redness, nor sensation. *Tartar emetic* was, therefore, applied to a part of the surface of a new and very thick epispastic; and on the third day, by the combined operation of all these agents, vesication and tenderness was produced, with manifest relief to all the symptoms, except the nausea. This continued, in spite of large and repeated doses of the sedative anti-spasmodic pills, and other anti-emetics, so as to require an epispastic to the scrobiculis cordis. As a tonic and cardiac, the tinct. of Peruvian balsam was liberally given, and my patient, by the 15th of the month, and fifteen days after the injury, was in a situation to be left to a nourishing diet and tonics for her debility.

It is worthy of notice that the tine of the pitchfork penetrated quite through the toe of Ferguson, in the first case, and the tine of the tablefork quite through the thumb of Cordelia, in the second. The entire loss of sensation in both of the injured limbs was a curious, and to me novel, occurrence. In both, likewise, when sensation and soreness were produced, the symptoms abated. There was a similarity in the general train of morbid phenomena in the two patients, but not an identity. Ferguson had spasms in his limbs and pain in his stomach. Cordelia had neither. She had nausea and puking, however, which Ferguson had not. To move the bowels, in both cases, pills formed of crumb of bread with calomel and croton oil,* were used.

Does the season of the year dispose wounds to produce tetanus? I think it does. A majority of the cases which I have seen have occurred in the spring; and if I mistake not, three of them in the month of April. Perhaps it will be found that other spasmodic diseases are most prone to occur in the spring months. St. Vitus's dance is said to have had its name from numbers of young women having been seized with the disorder at the feast of St. Vitus, which was held in May.

P. S.—In a religious paper, *The New York Observer*, a case is mentioned of a child which fell into a barrel of scalding hot water, up to its neck, which was prepared for scalding hogs. And it is stated that this child recovered by the application of an ointment applied to the whole surface, made of soot. It is also stated to be material that the soot be taken from a chimney where the fire has been made of wood. As similar cases, so far as I know, have uniformly proved fatal, I thought this notice for your interesting Journal might be the means of directing the attention of physicians to this remedy, if it should prove to be such. The soot may be formed into a liniment with lard, fresh butter or olive oil—first reducing it to an impalpable powder.

Very respectfully, your obedient servant, JOSEPH COMSTOCK.

Lebanon, Ct., April 20th, 1840.

CASE OF INSANITY.

[Communicated for the Boston Medical and Surgical Journal.]

MR. H****, about 60 years of age, an active, laboring and wealthy farmer, became low spirited—a hypochondriac—lost his appetite and flesh—avoided society, and confined himself much to his house—expressed great apprehension of poverty, of becoming a town charge, of being sent to a poor-house, &c. He was observed by the family of his son, with whom he lived, in this moody state of mind to steal out of the house secretly with a gun, and take the way to a field where he had laborers at work. As he was no sportsman, and had not been known to use a gun for years, his son followed and inquired of him his intentions. Mr. H. seemed very much agitated and distressed, and told his son that as he was utterly unable to pay the wages, as he had contracted, to his hired men, he had come to the determination to *shoot* them and get rid of the debt. Mr. H.'s habits of living were those of farmers generally in his neighborhood of his age and class. His diet was substantial, and, when laboring and in health, he used spirits of some kind, in small quantities, two or three times, perhaps, daily—and though never intoxicated, such had been his habit all his life.

---

* In the first case there occurs an error of the press. The pills are stated (page 156) to have been made of castor oil and calomel. It should have been *croton* instead of *castor*.

Was this "insanity from fear of poverty"? or from "intemperance"?

About six months before this period, Mr. H. lost his wife, a worthy, sensible woman. And it was not long after this event his family noticed that he was melancholy, &c. &c., and grew more and more so up to the time he had prepared himself to shoot his hired men.

Was it "insanity from domestic affliction"?

Mr. H. was not, constitutionally, of the "melting mood." He had never been suspected of suffering from a too keen and lively sensibility; and the sickness and death of his wife seemed to produce in him no uncommon expression of grief or sorrow. Several weeks had elapsed, certainly, after the death of Mrs. H. before the family observed any failure of his health.

I saw Mr. H. at this time, with his attending physician, and was made acquainted with the circumstances detailed above. We did not ascribe his insanity to "fear of poverty," to "intemperance," or to "domestic affliction."

When at home and not engaged in the labors of his farm, Mrs. H., his wife, was his only companion and confidant. His son and family, though their mutual relations were in every way pleasant and satisfactory, were no associates for the "old man," the father. He had no one now to whom he could unbosom himself. The death of Mrs. H. deprived him suddenly of a mental excitement—a stimulus—which time and age had now rendered indispensably necessary to him, and for which his own resources furnished him no equivalent. It happened, too, to Mr. H. at an unpropitious season of the year, which precluded his seeking an equivalent abroad; and though for a time his animal appetites remained unimpaired, the digestive organs, for want of proper nervous influence derived directly from the brain, performed their functions slowly and imperfectly—thence this direct and sympathetic affection of brain, at length resulted in mental alienation—insanity. The same thing has happened to men of business; equally to the commercial man, for instance, who voluntarily retires from the calculations of the counting house, to luxuriate in comparative idleness on his wealth, and to the man who is driven from a similar situation by pecuniary losses. The same thing might happen to an old maid on losing her pug dog or her pet cat.

A few blue pills, with aloes, and a spirited resumption of the active labors and cares of his farm, with a gradual return to his customary habits of living, effected a speedy cure. And now, six years since, at nearly 70 years of age, Mr. H. has suffered no return of insanity, nor serious indisposition of any kind, but takes regularly his three meals and his grog, daily, and is a hale, stout, active, laborious man.

Springfield, May 8th, 1840. JOSEPH H. FLINT.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 20, 1840.

PHYSICAL EDUCATION.

WITHIN the last few years a great deal has been said and written upon the subject of physical education, by all sorts of persons. That it was necessary to awaken the people—to instruct them—to show how a refined civilization had a tendency, under modern training, to ruin the body in developing the powers of the mind, will not be questioned. But physical education, like a hired horse, has been over-driven; the subject has had the misfortune to be handled so freely by educational quacks—those parasites, who fasten themselves upon the community as the old man of the sea did to the shoulders of Sindbad the sailor—that when a man of profound attainments addresses himself to the intelligence or sympathies of those who should be most influenced by his facts or his philosophy, they hardly acknowledge the civility of having been spoken to at all.

We have before us a discourse by Dr. A. L. Peirson, of Salem, Mass., delivered before the American Institute of Instruction, at Springfield, in August last, which is not only an amusing production—being both a thing of pith and wit—but also distinguished throughout for its important truths in relation to the physical culture of youth. The ingenious author prefaces it, in part, thus:—

"Some of the remarks are those which occurred to me in the course of miscellaneous reading, and I would honestly affix a mark to the property of others to distinguish it from my own, if my memory retained any clue to guide me in doing it. Nevertheless, I hold this to be not of the slightest importance, for I am of opinion that it is just as honest to steal the language, as the ideas of others, as the canny broom-maker preferred purloining the brooms ready made, to plundering the stock of which to make them."

If the members of the institution returned to their homes and neglected to practise the wise precepts which Dr. Peirson clearly proved were nature's law for the well-being of the beautiful machinery of the body—if their children have distorted spines hereafter—it cannot be said that they have not been seasonably advised. There are so many beauties, and such a multitude of important illustrations, interspersed through the pamphlet, that it is difficult to select a paragraph, and detach it from its connections, without misrepresenting the train of reasoning. The following is important.

"But the fault of this education is, it is too partial, it does not develope the faculties in anything like an equal proportion; it is, if you please, too *intellectual*. It produces too rapid a development of the intellectual faculties without waiting for a corresponding growth and corroboration of those organs with which the intellectual faculties are essentially connected; and hence the unnatural excitement of the one exhausts the energy of the other. Sound philosophical education should be *gradual.* One organ should not be tasked at the expense of another, but there should be a reasonable waiting and delay for each to come forward and expand itself. In short, education should be *natural.* Once more let us consult nature in her humbler performances. Does the rose bloom most perfectly when trusted to time under the genial influences of light, and heat, and moisture? or when the impatient florist has rudely torn open the petals of the tender bud? And is it any less ridiculous and absurd to stimulate the minds of the young to a precocious forwardness at the expense of their bodily health and customary hilarity? But nothing demonstrates the imperfection of some parts of our system of education more, than the subjects of it themselves, after they have attained all that was contemplated. In very many instances there is not health enough left to practise those very accomplishments which it had been the object of their instructers to confer upon them."

Here is something belonging to the department of nature's cabinet of curiosities.

"It may be stated as a law of animal economy, that the exercise of an organ is necessary not only to its development and perfection, but even to its preservation. This is often exemplified by the state of parts which are not kept in due activity, for if they are not exercised they degenerate, while by exercise their size and vigor may often be carried beyond the natural degree of perfection. Compare the legs of a foot-soldier, increased beyond their natural size, by his perpetual marchings and counter-marchings, with those of the dragoon, which have become almost useless, and are dwindled to an insignificant appearance, by the want of exercise, and the pressure of the boot and saddle. So the bandaging a limb and laying it at rest, will cause it to diminish, a practice well understood by deceiving mendicants. The fact, then, is sufficiently obvious, that the nutrition and growth of the *muscles*, are promoted by their motion and use. But although not so obvious, this is equally true of the *bones*. The fundamental law is, that inaction creates loss of power and atrophy, or wasting; that every part degenerates unless it continues to perform to a certain degree its peculiar functions. The changes in the muscular system are visible or cognizable to the senses, but those in the bones are, from their position, necessarily concealed. There are not wanting, however, opportunities of ascertaining these changes, which are familiar to most medical men. As soon as a bone becomes permanently dislocated, the vacated and useless socket becomes filled up, and smoothed to a level with the surrounding bone. If a soldier, in active service, receive a wound for which *immediate* amputation is necessary, or if the same operation be performed on a strong laborer, while he is in full health and exercise, the bone is found nearly as hard and dense as ivory. But let the patient be confined in a hospital, without any motion in the limb for a number of weeks, and the bone becomes soft and spongy. Medical museums contain many specimens of this change of structure."

Since physicians have it in their power to influence the public mind very considerably, we can conscientiously recommend Dr. Peirson's lecture to them, fully believing that they would feel compensated for the trouble of reading it. But it is necessary to close, though there are whole pages which might be transferred to the Journal, and read with profit to all who take an interest in the progress of a correct system of physical education.

Medical Convention at Philadelphia.—It will be recollected that delegates were chosen from several medical associations, here and there, to meet at Philadelphia the beginning of this month, to deliberate upon the interests, prospects, &c. of medical science in the United States. The true object, in fact, was to organize a society similar to the British Medical Association, the influence of which is felt to be excellent. But the meeting was a failure. If Massachusetts and other States had had two or three delegates present, there would have been some hope of success. The finances of our Medical Society, of late, however, will not admit of any unnecessary expenditure of its funds. Our correspondent, in the lines below, sums up the doings of the delegates who attended, in a small compass.

"There were but two or three State societies, and no medical colleges, which responded to the call of the New York State Society to send delegates to a National Convention; and none appeared but Drs. Beck and Wing of the New York delegation, and the whole delegation of New Hampshire, Drs. Howe, Hill and Chadbourne. Dr. Chapman had been appointed by the University of Pennsylvania, and six others were appointed by the Society of the city of Philadelphia, after our arrival. The delegates were so few in number, and for other reasons, they did not think it advisable to organize. They believed, and such was the opinion of the medical gentlemen with whom they conversed in Philadelphia, that before a convention could be held which would promote the interest of medical science, specific objects should be laid before the profession and discussed in the medical journals. This may yet be done—and it is desirable that it should be done by those who are so well qualified to do justice both to the subject of medical science and the measures best qualified to promote it."

Torticollis.—Dr. Lewis operated last week for relieving the deformity arising from wry neck. The patient is a gentleman of 25 years of age, and the distortion has been from his infancy. During the operation a vein was divided of about the calibre of a quill, and the patient immediately exhibited symptoms of dissolution caused by the entrance of air into the divided vessel. The peculiar noise was evident to the gentlemen assisting. The further admission was prevented by ligature, and the patient shortly recovered and is now doing very well. The object of the operation is fully accomplished. Is not the danger of applying ligatures to veins too strongly insisted on by surgical writers? The patient whose arm was amputated at the shoulder-joint by the above-named surgeon, had the subclavian tied without any bad consequences.

Artificial Anatomy.—A sickly-looking pamphlet came to us from New York, the other day, called "Reports on the Artificial Anatomy of Dr. Auzoux," &c., which contains the simple statement of Pariset, Secretary of the Royal Academy of Medicine, Gueneau de Mussy, Passy, Baron Dupin, Portal, Dumeril, Boyer, Serres, St. Hilaire, Prof. Laennec, &c. &c., that they think favorably of Dr. Auzoux's invention of the manakin. That it is an ingenious illustration of the general anatomy of the human body, must be admitted by all who examine one of them. That it is ultimately destined to supersede dissections, is perfectly idle to suppose. For popular lectures before mixed audiences, the beautiful models of Dr. Auzoux are, beyond question, superior to any others known. Dr. G. S. Bedford, of New York city, is succeeding admirably, we understand, in a course of lectures with one of these artificial anatomical figures.

Premium for Filling Teeth.—Dear Sir,—I read, with some little surprise, in your Journal of April 29th, a notice, which has induced me to inquire of the intelligent gentlemen who composed the committee to examine the dental department at the late fair in this city, if they did or did not award a premium, or recommend for such award, any specimens of teeth filled and presented there; and if so, upon what principle such award was made.

I know well that the high character and scientific attainments of the gentlemen composing that committee are a sufficient pledge that whatever they actually did, was done with a good and sufficient motive, though that motive is surely not apparent on the face of it; it being obviously as absurd to award a premium to a tooth filled out of the head, and without reference to its success, which could only be known by experience in the living subject, as it would be to award a prize for successful surgery to one who should offer, as a specimen of his skill in that department, the broken humerus of a skeleton dressed in splints. Yours, &c. Y.

Cæsarean Operations.—We record the following short notes of Cæsarean operations which have been recently performed.

1. Cæsarean operation, followed by success for both mother and child; by Dr. E. Michaëlis, of Kiel.
2. Cæsarean operation, followed by the death of the mother; by Mr. Ward.
3. Extraction of a living child, death of the mother on the third day; by Dr. Flamm.
4. Operation performed for the second time, with success, on the same woman; by Dr. Fox.
5. Fourth successful operation on the woman named Adametz; by Dr. Michaëlis.
6. An operation, equally successful, on a rachitic woman, 37 years of age. Dr. M. has been extremely fortunate in his operations. He has performed it four times, and in three succeeded in saving the lives of the mother and child. Within the last eight years ten Cæsarean operations have been performed in Holstein, and only three of the ten have terminated unfavorably.
7. Successful operation; by Dr. Bauer.
8. Operation successful for the mother, fatal to the child; by Dr. Herzbruch.
9. Successful case; by Dr. Wright.
10. Two successful cases; by Drs. Schenck and Petreuz.—*L'Experience.*

Married,—In Leominster, Mass., Dr. W. D. Peck, of Sterling, to Miss Elizabeth, daughter of Dr. Charles W. Wilder, of L.

Died,—In Boston, Dr. Rufus Barrus, aged 69.—In Kentucky, Dr. Hawkins, waylaid and shot in the highway, by some person unknown.—At Rock Castle, Va., Samuel L. Campbell, M.D., 75.—In Rindge, N. H., Dr. Thomas Jewett, 69.—At Norwich, Ct., Dr. Joseph Thomas, 68.

Number of deaths in Boston for the week ending May 16, 28.—Males, 15—females, 13.

Of consumption, 2—lung fever, 3—casualty, 1—dropsy, 1—infantile, 4—brain fever, 1—smallpox, 2—diarrhœa, 1—inflammation of the bowels, 2—drowned, 1—hooping cough, 3—inflammation of the liver, 1—inflammation of the lungs, 1—apoplexy, 1—debility, 1—child-bed, 1—decline 1.

MEDICAL BOOKS AND PAMPHLETS.

For sale, at this office, Remarks on some of the Medicinal Springs of Virginia. By Geo. Hayward, M.D., Boston. Price 12 1-2 cts.

A Letter respecting Santa Cruz as a winter Residence for Invalids; addressed to John C. Warren, M.D. By the late Rev. Joseph Tuckerman, D.D. Price 12 1-2 cts.

Orders for Drs. Bigelow and Holmes's edition of Marshall Hall's Theory and Practice of Medicine, and other recent medical works, will be attended to, and the books furnished at the lowest retail price.

One set of the Boston Med. and Surg. Journal may be obtained at this office. Of some of the vols. there are many copies remaining, which will be sold low.

MASSACHUSETTS MEDICAL SOCIETY.

The annual meeting of the Massachusetts Medical Society will be holden at the Temple, Tremont Street, on Wednesday, 27th inst., at 10 o'clock, A. M. The annual discourse will be delivered at 1 o'clock, P. M., by Abel L. Peirson, M.D., of Salem. Literary gentlemen interested in medical science, and students of medicine, are respectfully invited to attend. Dinner at 1-2 past 2, at the United States Hotel, opposite the Boston and Worcester Rail-road Depot.

A stated meeting of the Counsellors will be held on the day following, at the Society's room, Athenæum buildings, Pearl Street, at 10 o'clock, A.M. S. D. TOWNSEND,

May* 13—3t** ***Recording Secretary.

MEDICAL TUITION.

The subscribers offer the following advantages to medical students.

Students will be allowed free access at all hours to the United States' Marine Hospital at Chelsea, and will be permitted to examine and make records of all the cases that occur there. On an average there are at least sixty patients at the institution. Dr. Stedman will make a daily morning visit, and Drs. Perry, Bowditch and Wiley will, in turn, visit two afternoons every week, from March 1st to October 31st, for the purpose of clinical observation with the students. Dr. Bowditch will deliver a course of lectures upon diseases of the chest, with especial reference to the physical signs.

In addition to the above, admission will be granted to the medical and surgical visits at the Massachusetts General Hospital; to the Infirmary for Diseases of the Lungs; to the practice of one of the Dispensary districts, and to the Smallpox Hospital. Abundant opportunities for dissections and operative surgery, and occasionally for the practice of midwifery.

Regular courses of instruction will be given as follows:—

On Anatomy and Medical Jurisprudence, by	Dr. Smith.
Surgery, by	Dr. Stedman.
Theory and Practice of Medicine, by	Dr. Perry.
Midwifery, Diseases of the Chest, and Demonstrations on Morbid Anatomy, at the Hospitals, by	Dr. Bowditch.
Materia Medica and Chemistry, by	Dr. Wiley.

Rooms for study, either at Boston or Chelsea, free of expense. For terms, apply to H. G. Wiley, or to either of the subscribers.

M. S. PERRY, C. H. STEDMAN, H. G. WILEY,
H. I. BOWDITCH, J. V. C. SMITH.

Jan. 29—ep1meoptf

THOMPSON'S APPARATUS FOR THE CURE OF PROLAPSUS UTERI, &c.

In offering his instrument to the faculty, Dr. Thompson would call their attention to the following statements, and request all interested to examine the article in the hands of his agents

Extract of a letter from the late Professor Eberle, to the Hon. H. L. Ellsworth, Commissioner of Patents, &c., dated

***Cincinnati, May* 11, 1837.—"I have carefully examined the new *Uterine Truss* invented by Dr. Robert Thompson, of Columbus, in this State, and I can confidently declare, that it is unquestionably the most perfect and useful instrument of the kind, that has ever been offered to the public. It differs essentially in its construction, from the Uterine Truss contrived by Dr. Hull, and is, in all respects, a far superior instrument."**

See, also, "The Western Journal of Medical and Physical Sciences."

Professor McCleland, of Jefferson Medical College, Philadelphia, Pa., declared, upon examining the instrument, that "every word of Dr. Eberle's opinion is true." Professors Channing and Hayward, of Boston, expressed like opinions.

Extract of a letter from Prof. Sewall to Prof. Bigelow, dated

***18th May*, 1837.—"Dr. Thompson will be pleased to show you a *Uterine Truss* which he has invented, of very superior structure to anything we have."**

Extract of a letter from Prof. Peixotto to Dr. Thompson, dated

***Columbus, Jan.* 18, 1838.—"Your instrument, it appears to me, is formed on principles more enlarged, than those hitherto recommended for the same end, and mechanically different. I would cheerfully recommend its adoption by our professional brethren generally."**

For sale in Boston by Theodore Metcalf, apothecary, No. 33 Tremont Row. Price, $7, $10 and $12.

June 12—1y

THE BOSTON MEDICAL AND SURGICAL JOURNAL is published every Wednesday, by D. CLAPP, JR., at 184 Washington St., corner of Franklin St., to whom all communications must be addressed, post paid. It is also published in Monthly Parts, with a printed cover. There are two volumes each year. J. V. C. SMITH, M.D., Editor. Price $3,00 a year in advance, $3,50 after three months, or $4,00 if not paid within the year. Two copies to the same address, for $5,00 a year, in advance. Orders from a distance must be accompanied by payment in advance or satisfactory reference. Postage the same as for a newspaper.